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EXAMINER

GOLBA, TARA M

ART UNIT	PAPER NUMBER
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3644

DATE MAILED: 01/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/091,782

Applicant(s)

CHEN ET AL.

Examiner

Tara M. Golba

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-93 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-93 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5-8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to for the following reasons: First, the drawings are not consistent in their use of reference signs because they mix reference signs and words in the same figure. In figures 4 and 5, for example, every element should be designated by a reference number that is likewise included in the text of the specification. This will eliminate ambiguity concerning the exact element being described or illustrated. In figure 5, "Reference control" is misspelled. In figure 1, the flowchart includes arrows which appear to have no origin. In figure 2, some of the text has been chopped off in the boxes. In figure 4, the elements discussed in the text (milk pipe line, milk sample storing means) must be labeled with a reference sign. In figures 4 and 5, the same reference signs have been used to designate different elements of the invention; each element should have a unique reference sign. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because it includes the word "means".

Correction is required. See MPEP § 608.01(b).

5. The disclosure is objected to because of the following informalities: On page 20, line 33, "rec??ord" should be --record--.

Appropriate correction is required.

Claim Objections

6. Claims 1, 32, 37, 49, 61, 66, 78, 92 are objected to because of the following informalities: In claims 1 and 49, the second subheading "(e)" should be --(g)--. In claim 32, line 11, "is transported" should be --are transported--. In claim 37, line 35, "rec??ord" should be --record--. In claim 61, there should be a comma after "a teat tube". In claim 66, the claim should begin with "A method". In claim 78, line 36, "form" should be --from--. Claim 92 should end with a period. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-93 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims use means-plus-function limitations without corresponding disclosure of specific structures or materials for every limitation. Examples include "means for detecting signals" (where the specification simply states that "conventional means" for detecting signals

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may be used), “means permitting the sample collecting means to be cleaned between samples”, “means for storing a buffer solution or a dilute solution”, and “means for controlling the temperature of the milk sample being collected”. The applicant must describe at least one specific structure or material that corresponds to the claimed means in question, and to identify the precise location or locations in the specification where a description of at least one embodiment of that claimed means can be found.

9. Regarding claims 1-93, whenever the phrase “said means” is used (for example, claim 1, line 9), the phrase must be accompanied by the appropriate function of the means (for example, “said means for collecting a milk sample”). Also, throughout the claims, the word “means” is sometimes preceded by words such as “separate” (claims 1, 49), “analytical” (claims 8, 11, 45, 46, 56, 59) or “data output” (claims 1, 49, 93) in an attempt to use a “means” clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding “means” in these instances, it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

10. Claims 1, 8, 19, 24, 48, 49, 56, and 93 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In any claims where the phrase “and/or” appears, it is unclear whether applicant is claiming one recited element or both recited elements.

11. Claims 1, 12-14, 49, 56, 60-62, and 93 recite the limitations “the herd milking system” or “the milking system.” There is insufficient antecedent basis for these limitations in the claims.

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12. Regarding claim 14, the phrase “optionally provided with” renders the claim indefinite because it is unclear whether the separate milk metering device is being claimed or not.

13. Regarding claims 19 and 65, the measurement “U/ml” must be clearly defined. If the “U” stands for “units”, this must be clearly stated in the specification or claims.

14. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by “such as” and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 23 recites the broad recitation 0-30 ng/ml, and the claim also recites 0-20 ng/ml, which is the narrower statement of the range/limitation. This same indefinite language appears in claims 26, 69, 71, and 74.

15. Claim 38 recites the limitation “the herd manager”. There is insufficient antecedent basis for this limitation in the claim.

16. Claims 39 and 40 recite the limitation “the system” without clearly stating which system is being discussed. A “system for optimising the production performance of a milk producing

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animal herd” and a “herd milking system” are previously mentioned, so “the system” must clearly refer to the system in question.

17. Claims 45 and 46 refer to “the analysing means” but there are two different “analysing means” in claim 1 and claims 45 and 46 must therefore be more specific.

18. Claim 49 recites “signal/signals” but it is unclear if applicant is claiming one signal or a plurality of signals.

19. Claims 4 and 52 recite “a proportional milk sample” but fail to specify what the milk sample is proportional to.

20. Claim 56 recites the limitation “the means for storing a milk sample” in lines 21-22. There is insufficient antecedent basis for this limitation in the claim.

21. Claim 81 recites the limitation “the herd manager” in line 17. There is insufficient antecedent basis for this limitation in the claim.

22. Claims 88-90 fail to specify which “analysing means” is being discussed.

23. Claim 93 recites “means for connecting it” on line 34, but it is unclear what is meant by “it”.

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claims 1-7, 9, 10, 12-15, 20, 24-29, 31-39, 41-44, 48-55, 57, 58, 60-62, 66, 70-82, 84-87, and 91-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No.

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5,743,209 to Bazin et al (cited by applicant) in view of U.S. Patent No. 5,873,323 to van den Berg et al (cited by applicant).

In reference to claim 1, Bazin discloses an automated or semi-automated system for optimizing milk production (column 6, lines 4-8) including: means for collecting a milk sample from a herd member, the means connectable to the milking system (column 11, lines 47-50); means for recognizing a herd member identification code (column 11, lines 10-40); means for storing data including physiological and nutritional data and point in time in the lactation cycle (column 2, lines 10-24); means for analyzing a plurality of parameters in a sample (column 4, lines 17-23), the means comprising means for generating detectable signals (column 9, lines 29-31) and means for detecting the generated signals (column 3, lines 55-60); means for converting the signals into a set of data indicative of the condition of the herd member (column 4, lines 5-25); means for storing the set of data (column 3, lines 65-66); and data output means (column 3, lines 66-67). Bazin does not disclose separate analyzing means for analyzing individual parameters, but it would have been obvious to include a plurality of analyzing means for analyzing individual parameters, since it has been held that a duplication of the essential working parts of a device involves only routine skill in the art. Bazin does not disclose means for storing data about the reproduction cycle, or that a means for directing the milk sample to analyzing means is activated at pre-selected times or time intervals in the reproduction or lactation cycles.

Van den Berg teaches a milking system including means for storing data about the reproduction cycle (column 4, line 14), and means for directing milk samples to analyzing means at pre-selected time intervals in the reproduction or lactation cycles (column 4, lines 1-22, when milk is only sampled for animals with a certain dead time, i.e. animals at a given time interval in

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reproduction or lactation cycles). The storage of reproduction data allows a farmer to know when an animal is estrous, and the pre-selected time intervals for analyzing milk samples ensure that milk is sampled at the proper time (column 4, lines 19-22). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include reproduction data and pre-selected analysis time intervals, as taught by van den Berg, in the system disclosed by Bazin, to provide an indication of when animals are estrous and to ensure that milk samples are analyzed at appropriate times.

In reference to claims 2 and 3, van den Berg teaches that a milking system can be used to collect milk from an individual mammary gland or from two or more mammary glands (column 1, lines 50-60).

In reference to claim 4, Bazin discloses collecting a proportional milk sample (column 3, lines 42-44).

In reference to claim 5, Bazin discloses collecting a subsample (column 5, lines 4-5), and it is understood that the system operator selects the time interval at which this collection occurs.

In reference to claim 6, Bazin discloses means for storing a milk sample (figure 3A, element 31).

In reference to claim 7, Bazin discloses mixing means (column 8, lines 66-67).

In reference to claim 9, Bazin discloses means for storing a plurality of milk samples (column 8, lines 30-35).

In reference to claim 10, Bazin discloses storage means comprising storage containers (figure 3A, sample compartment 31).

In reference to claim 12, Bazin discloses pressure differences between milk storage means and the system (column 4, lines 55-58).

In reference to claim 13, Bazin discloses connection to a milk metering device (figure 1) and transporting tube (figure 3A), and van den Berg teaches that teat cups and tubes allow milk to be collected from the desired teats (column 1, lines 50-60).

In reference to claim 14, Bazin discloses a tubing element and a milk metering device (column 4, lines 55-61).

In reference to claim 15, Bazin discloses means for analyzing parameters indicative of energy and nutritional state (column 4, lines 15-23), and van den Berg teaches means for analyzing parameters indicative of mastitis and reproductive state (column 2, lines 30-35; column 4, lines 12-14). It would be obvious to include the means for analyzing parameters indicative of mastitis and reproductive state, as taught by van den Berg, in the system disclosed by Bazin, so that a farmer knows if animals need to be treated for an illness or if they are in estrous.

In reference to claim 20, van den Berg teaches means for analyzing a parameter indicative of reproduction state (column 4, lines 28-35).

In reference to claims 24-29, Bazin discloses means for analyzing protein balance by detection of urea and protein, and means for analyzing energy balance by detection of milk fat (column 4, lines 17-23). Bazin does not disclose detection of ketone body compound, but it would be within the level of ordinary skill in the art to determine the compounds that indicate energy balance, including ketone body compounds, and to test for these compounds during milk sample analysis. As Bazin notes, the system is designed to measure any components which can

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be analyzed by infrared spectrometry (column 4, lines 22-23). Although Bazin does not disclose detection of the specified ranges of MUN and BOHB, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

In reference to claim 31, Bazin discloses analyzing means analytically linked to a plurality of means for collecting a milk sample (column 8, lines 24-35).

In reference to claim 32, Bazin discloses transporting milk by a tube or conveyor element or by hand (column 5, lines 1-5).

In reference to claim 33, Bazin discloses analyzing means spatially separated from sample collecting means (column 5, lines 4-5).

In reference to claim 34, Bazin discloses enclosure elements (figure 3A).

In reference to claim 35, Bazin discloses means for analyzing a plurality of compounds or parameters at each milking site (column 8, lines 30-35).

In reference to claim 36, Bazin discloses the claimed database (figure 1).

In reference to claim 37, Bazin, as modified in view of van den Berg, discloses the claimed data to be analyzed in a milking system (Bazin: column 2, lines 1-24; van den Berg: column 4, lines 23-45).

In reference to claim 38, Bazin discloses a data management system capable of comparing real time analytical data received from the signal detection means with stored data and transmitting an instruction message to the herd manager (column 1, lines 52-61; column 3, lines 61-67; column 6, lines 52-58).

In reference to claim 39, Bazin discloses a database comprising historical data descriptive of the physiological and nutritional condition of members of one or more animal herds, the database being part of the system or an external database (column 2, lines 1-18).

In reference to claims 41-43, Bazin, as modified, discloses a system that provides information about reproductive cycles, mastitis, and nutrition (see discussion of claims 1 and 15), and it is therefore understood that the instruction messages generated by the system indicate if a herd member is ready for insemination, in need of mastitis treatment, or in need of a feeding scheme adjustment.

In reference to claim 44, Bazin discloses transmitting instructions to pre-selected specialists (column 1, lines 20-27, 48-51).

In reference to claim 48, Bazin discloses the claimed method steps including: collecting a milk sample; contacting the sample with analyzing means to generate a signal; recording the character of the signal to provide a set of analytical data; processing the data to provide a set of data; and taking steps to improve a physiological or nutritional condition of a herd member (figure 1; column 1, lines 58-60).

In reference to claim 49, Bazin, as modified in view of van den Berg, discloses the claimed method. See discussion of claims 1 and 48 above.

In reference to claims 50-55, 57, 58, 60-62, 66, 70-82, and 84-87, see discussion of claims 2-7, 9, 10, 12-14, 20, 25-29, 31, 32, 34, 33, 36-39, and 41-44, respectively.

In reference to claims 91-93, see discussion of claim 1 above.

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26. Claims 8 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bazin in view of van den Berg as applied to claims 1-3 and 6 above, and further in view of U.S. Patent No. 5,195,456 to van der Lely et al.

In reference to claims 8 and 56, Bazin discloses a sampling means connected to cleaning means (column 9, lines 8-10), means for storing a buffer or dilute solution (column 9, lines 9-12, where water or milk acts as a buffer solution), means for connecting milk storage means to other elements of the system (figure 3A), and means for transporting the milk sample (column 2, lines 45-47). Bazin does not disclose means for controlling the temperature of the milk sample.

Van der Lely teaches means for controlling the temperature of a milk sample (column 12, lines 35-38) for the purpose of maintaining high quality and purity (column 12, lines 45-48). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include temperature controlling means, as taught by van der Lely, in the system disclosed by Bazin, so as to keep the milk pure.

27. Claims 11, 45-47, 59, and 88-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bazin in view of van den Berg as applied to claim 10 above, and further in view of Swedish Patent No. 9902972 to Bjork et al. (cited by applicant).

In reference to claims 11 and 59, Bazin, as modified, does not disclose milk storage containers removable from the milk collecting means.

Bjork teaches that removable sample containers offer the advantage of allowing analysis to continue for a longer time and facilitate throwing the sample away (page 9). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was

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made to include removable containers, as taught by Bjork, in the system disclosed by Bazin, to allow for longer analysis times and to facilitate disposal of milk samples.

In reference to claims 45-47 and 88-90, Bazin discloses a spectrometric assay (column 4, lines 22-23). Bjork teaches that other known analyzing methods including biosensor analysis, biochemical assays, and radiation methods are equivalent analysis methods known in the art (page 8), thereby suggesting that different analysis methods would be equally effective in analyzing various compounds and parameters in a milk sample. It would have therefore been obvious to one having ordinary skill in the art at the time the invention was made to select an enzymatically based assay, an immunologically based assay, a biosensor analysis, a biochemical assay, a spectrometric assay, a flow injection based assay, or solid support analytical devices for analyzing a milk sample, since they are well-known analysis techniques in the art and since Bjork teaches that many different techniques would be equally effective. Bazin discloses links between analyzing means and storage and transport means for analytical devices (figures 3A, 3B).

28. Claims 16-19, 30, and 63-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bazin in view of van den Berg as applied to claim 15 above, and further in view of U.S. Patent No. 4,385,590 to Mortensen (cited by applicant), International Patent WO 99/18774 to Postma et al. (cited by applicant), and "Automatic monitoring of the health and metabolic status of dairy cows" by Mottram (cited by applicant).

In reference to claim 16, Bazin does not teach analysis of compounds or parameters indicative of mastitis.

Van den Berg, Mortensen, Postma, and Mottram teach that a number of compounds and parameters are known in the art as indicators of mastitis (Van den Berg: column 4, lines 40-45; Mortensen: column 1, lines 24-29; Postma: page 1; Mottram: table 2). It would therefore be obvious to one having ordinary skill in the art to select a parameter from the group consisting of somatic cells, microbial cells, an enzyme, a protein, a lipid, a mineral, a trace element, milk temperature, conductivity, and separable particles, since these are known parameters that indicate mastitis, and since it is desirable to detect mastitis so that animals in the herd can be treated accordingly.

In reference to claim 17, Mottram teaches analysis of an enzyme (table 2: NAGase).

In reference to claim 18, Mottram teaches analysis of the enzyme NAGase (table 2) but does not discuss LDH. Nevertheless, it would have been obvious to one having ordinary skill in the art to analyze the enzyme LDH, since it is within the level of ordinary skill in the art to determine which parameters are indicative of mastitis and should be tested for. These parameters are well-known, as discussed above in reference to claim 16.

In reference to claim 19, Mottram does not disclose detection of the claimed ranges of NAGase. However, it would have been obvious to detect amounts of NAGase in this range, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

In reference to claim 30, Bazin, van den Berg, Mortensen, Postma, and Mottram teach detection of the claimed compounds. See claims 16-19 and 21-29 for further discussion.

In reference to claims 63-65, see discussion of claims 17-19 above.

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29. Claims 21-23 and 67-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bazin in view of van den Berg as applied to claim 20 above, and further in view of Bjork et al.

In reference to claims 21-23 and 67-69, Bazin, as modified, does not disclose analysis of a hormone as indicative of reproduction cycle state. Bjork teaches detection of the hormone progesterone as an indicator of reproduction cycle state (page 4, line 26), and it would be within the level of ordinary skill in the art to discover the optimum range of progesterone being detected. Bjork teaches that the motivation for doing so is to know when insemination should take place (page 4), and it would therefore be obvious to analyze progesterone levels to determine when an animal is in heat.

30. Claims 40 and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bazin in view of van den Berg as applied to claim 39 above, and further in view of U.S. Patent No. 6,311,644 to Pugh.

In reference to claims 40 and 83, Bazin, as modified, does not disclose linking the external database to the system via the internet but discloses various other data links and interfaces for connecting system elements (column 10, lines 16-32).

Pugh teaches that internet connections and other means of outputting data such as charted displays, printouts, and communications links are equivalent devices known in the art (column 5, lines 28-39). Therefore, because internet links and other data links or output means were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute an internet connection, as taught by Pugh, for the data links disclosed by Bazin.

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Conclusion

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,394,028 to Birk

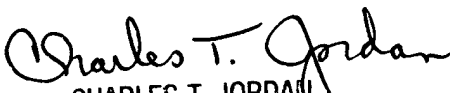
U.S. Patent No. 6,405,672 to De Mol et al.

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tara M. Golba whose telephone number is (703) 305-0266. The examiner can normally be reached on Monday-Thursday from 8:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Jordan can be reached at (703) 306-4159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

tmg
January 12, 2003


CHARLES T. JORDAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600